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Application No.: 10/828,411
Art Unit 3714

AMENDMENTS TO THE CLAIMS

1 (Currently amended). A video game system (1000) including a video game system controller (1010) that is arranged to execute a video game program, the video game system further including a micromechanical dispensing device (200, 400, 600, 700) that is arranged to dispense at least one fluid (1091) into an atmosphere (1020) under control of the video game system controller; where the micromechanical dispensing device comprises one or more micromechanical dispensing mechanisms (210, 212, 410, 411, 412, 610, 710, 711, 712); where the one or more micromechanical dispensing mechanisms comprise a thermally-actuated-and-driven paddle vane; and where the one or more micromechanical dispensing mechanisms are formed using micromachining and etching techniques; further comprising a sensor (1030) arranged to form a sensor signal (1035) based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the sensor signal to the video game system controller, wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the sensor signal (1035).

Claims 2-8 (Canceled).

9 (Currently amended). The video game system of claim 1 claim 8, wherein the thermally-actuated-and-driven paddle vane is arranged to move in response to a thermal expansion that results when an electric signal is applied, the thermal expansion thereby causing a paddle vane movement which ejects atmospheric substance comprises the at least one fluid that is dispensed by the micromechanical dispensing device.

10 (Currently amended). The video game system of claim 1 claim 8, wherein the atmospheric substance comprises a human body fluid.

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11 (Currently amended). The video game system of claim 10 ~~claim 8~~ , wherein the atmospheric substance comprises an odor or fragrance that is formed by a human body of any of the one or more video game players.

12 (Canceled).

13 (Currently amended). The video game system of claim 1, wherein the micromechanical dispensing device (200, 400, 600, 700) further comprises a dispensing device sensor (260, 460, 660, 760) arranged to form a ~~system~~ sensor signal (1035') based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the ~~system~~ sensor signal to the video game system controller, and wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the sensor signal (1035').

14 (Canceled).

15 (Currently amended). The video game system of claim 13 ~~claim 14~~ , wherein the atmospheric substance (1080) comprises any of the at least one fluid (1091) that is dispensed by the micromechanical dispensing device and an odor or fragrance that is formed by a human body of any of the one or more video game players.

Claims 16-18 (Canceled).

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19 (Currently amended). The video game system of claim 1, wherein the micromechanical dispensing device (200) comprises one or more micromechanical dispensing mechanisms (210, 212) arranged to dispense one or more fluids (271, 273) into the atmosphere, each of the one or more micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of one or more fluid reservoirs (220, 222), and wherein any of the one or more fluid reservoirs (220, 222) contain a fluid (271, 273) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

Claims 20-21 (Canceled).

22 (Currently amended). The video game system of claim 1, wherein the micromechanical dispensing device (400) comprises a plurality of micromechanical dispensing mechanisms (410, 411, 412) arranged to dispense a plurality of fluids (471, 472, 473) into the atmosphere, each of the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of a plurality of fluid reservoirs (420, 421, 422), and wherein any of the plurality of fluid reservoirs (420, 421, 422) contain a fluid (471, 472, 473) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

Claims 23-24 (Canceled).

25 (Currently amended). The video game system of claim 1, wherein the micromechanical dispensing device (600) comprises a micromechanical dispensing mechanism (610) arranged to dispense a plurality of fluids (671, 672, 673) into the atmosphere, the micromechanical dispensing mechanism being fluidly coupled to an included valve (665), wherein the valve is arranged to selectively fluidly couple the micromechanical dispensing mechanism to a plurality of fluid reservoirs (620, 621, 622), and wherein any of the plurality of fluid reservoirs (620, 621, 622) contain a fluid (671, 672, 673) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

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Claims 26-27 (Canceled).

28 (Currently amended). The video game system of claim 1, wherein the micromechanical dispensing device (700) comprises a plurality of micromechanical dispensing mechanisms (710, 711, 712) arranged to dispense a fluid (771) into the atmosphere, the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a fluid reservoir (720), wherein the fluid reservoir (720) contains a fluid (771) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

Claims 29-30 (Canceled).

31 (New). A video game system (1000) including a video game system controller (1010) that is arranged to execute a video game program, the video game system further including a micromechanical dispensing device (200, 400, 600, 700) that is arranged to dispense at least one fluid (1091) into an atmosphere (1020) under control of the video game system controller; where the micromechanical dispensing device comprises one or more micromechanical dispensing mechanisms (210, 212, 410, 411, 412, 610, 710, 711, 712); where the one or more micromechanical dispensing mechanisms comprise an electrostatically-actuated and driven piston; and where the one or more micromechanical dispensing mechanisms are formed using micromachining and etching techniques.

32 (New). The video game system of claim 31, where the electrostatically-actuated and driven piston is arranged to move when an electrostatic force is applied thereto, thereby causing an electrostatically-actuated piston movement which ejects the at least one fluid that is dispensed by the micromechanical dispensing device.

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33 (New). The video game system of claim 31 further comprising a system sensor (1030) arranged to form a system sensor signal (1035) based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the system sensor signal to the video game system controller, wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the system sensor signal (1035).

34 (New). The video game system of claim 33, wherein the atmospheric substance comprises a human body fluid or an odor or fragrance that is formed by a human body of any of the one or more video game players.

35 (New). The video game system of claim 31, wherein the micromechanical dispensing device (200, 400, 600, 700) further comprises a dispensing device sensor (260, 460, 660, 760) arranged to form a system sensor signal (1035') based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the system sensor signal to the video game system controller, and wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the system sensor signal (1035').

36 (New). The video game system of claim 35, wherein the atmospheric substance (1080) comprises any of the at least one fluid (1091) that is dispensed by the micromechanical dispensing device and an odor or fragrance that is formed by a human body of any of the one or more video game players.

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37 (New). The video game system of claim 31, wherein the micromechanical dispensing device (200) comprises one or more micromechanical dispensing mechanisms (210, 212) arranged to dispense one or more fluids (271, 273) into the atmosphere, each of the one or more micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of one or more fluid reservoirs (220, 222), and wherein any of the one or more fluid reservoirs (220, 222) contain a fluid (271, 273) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

38 (New). The video game system of claim 31, wherein the micromechanical dispensing device (400) comprises a plurality of micromechanical dispensing mechanisms (410, 411, 412) arranged to dispense a plurality of fluids (471, 472, 473) into the atmosphere, each of the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of a plurality of fluid reservoirs (420, 421, 422), and wherein any of the plurality of fluid reservoirs (420, 421, 422) contain a fluid (471, 472, 473) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

39 (New). The video game system of claim 31, wherein the micromechanical dispensing device (600) comprises a micromechanical dispensing mechanism (610) arranged to dispense a plurality of fluids (671, 672, 673) into the atmosphere, the micromechanical dispensing mechanism being fluidly coupled to an included valve (665), wherein the valve is arranged to selectively fluidly couple the micromechanical dispensing mechanism to a plurality of fluid reservoirs (620, 621, 622), and wherein any of the plurality of fluid reservoirs (620, 621, 622) contain a fluid (671, 672, 673) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

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40 (New). The video game system of claim 31, wherein the micromechanical dispensing device (700) comprises a plurality of micromechanical dispensing mechanisms (710, 711, 712) arranged to dispense a fluid (771) into the atmosphere, the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a fluid reservoir (720), wherein the fluid reservoir (720) contains a fluid (771) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

41 (New). A video game system (1000) including a video game system controller (1010) that is arranged to execute a video game program, the video game system further including a micromechanical dispensing device (200, 400, 600, 700) that is arranged to dispense at least one fluid (1091) into an atmosphere (1020) under control of the video game system controller; where the micromechanical dispensing device comprises one or more micromechanical dispensing mechanisms (210, 212, 410, 411, 412, 610, 710, 711, 712); where the one or more micromechanical dispensing mechanisms comprise an electrostatically-actuated and driven membrane; and where the one or more micromechanical dispensing mechanisms are formed using micromachining and etching techniques.

42 (New). The video game system of claim 41, where the electrostatically-actuated and driven membrane is arranged to move in response to a voltage signal being applied to the membrane, the resulting membrane movement thereby ejecting the at least one fluid that is dispensed by the micromechanical dispensing device.

43 (New). The video game system of claim 41 further comprising a system sensor (1030) arranged to form a system sensor signal (1035) based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the system sensor signal to the video game system controller, wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the system sensor signal (1035).

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44 (New). The video game system of claim 43, wherein the atmospheric substance comprises a human body fluid or an odor or fragrance that is formed by a human body of any of the one or more video game players.

45 (New). The video game system of claim 41, wherein the micromechanical dispensing device (200, 400, 600, 700) further comprises a dispensing device sensor (260, 460, 660, 760) arranged to form a system sensor signal (1035') based on an atmospheric substance (1080) comprised in the atmosphere and to communicate the system sensor signal to the video game system controller, and wherein the video game system controller is arranged to control the micromechanical dispensing device (200, 400, 600, 700) based on the system sensor signal (1035').

46 (New). The video game system of claim 45, wherein the atmospheric substance (1080) comprises any of the at least one fluid (1091) that is dispensed by the micromechanical dispensing device and an odor or fragrance that is formed by a human body of any of the one or more video game players.

47 (New). The video game system of claim 41, wherein the micromechanical dispensing device (200) comprises one or more micromechanical dispensing mechanisms (210, 212) arranged to dispense one or more fluids (271, 273) into the atmosphere, each of the one or more micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of one or more fluid reservoirs (220, 222), and wherein any of the one or more fluid reservoirs (220, 222) contain a fluid (271, 273) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

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48 (New). The video game system of claim 41, wherein the micromechanical dispensing device (400) comprises a plurality of micromechanical dispensing mechanisms (410, 411, 412) arranged to dispense a plurality of fluids (471, 472, 473) into the atmosphere, each of the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a corresponding fluid reservoir of a plurality of fluid reservoirs (420, 421, 422), and wherein any of the plurality of fluid reservoirs (420, 421, 422) contain a fluid (471, 472, 473) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

49 (New). The video game system of claim 41, wherein the micromechanical dispensing device (600) comprises a micromechanical dispensing mechanism (610) arranged to dispense a plurality of fluids (671, 672, 673) into the atmosphere, the micromechanical dispensing mechanism being fluidly coupled to an included valve (665), wherein the valve is arranged to selectively fluidly couple the micromechanical dispensing mechanism to a plurality of fluid reservoirs (620, 621, 622), and wherein any of the plurality of fluid reservoirs (620, 621, 622) contain a fluid (671, 672, 673) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.

50 (New). The video game system of claim 41, wherein the micromechanical dispensing device (700) comprises a plurality of micromechanical dispensing mechanisms (710, 711, 712) arranged to dispense a fluid (771) into the atmosphere, the plurality of micromechanical dispensing mechanisms arranged to fluidly couple to a fluid reservoir (720), wherein the fluid reservoir (720) contains a fluid (771) comprising any of a fragrance, perfume, therapeutic, mood-enhancing agent, pheromone, moisturizer and humectant.